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<center>COMPLETE LISTING OF CLAIMS</center>

Please cancel claims 1-5, 22, and 34 without prejudice. Please rewrite claims 6-8, 21, 23, and 26 as indicated below.

Claims 1-5. (Cancelled)

6. (Currently amended) ~~The method of claim 1~~ A method for determining a position of a device, comprising:

receiving a plurality of pseudo range measurements from a transmitting source;

adjusting each of the plurality of pseudo range measurements for time correction and then arranging each of the plurality of pseudo range measurements in order of smallest value to largest value to form a pseudo range interval with the smallest value and the largest value as endpoints;

dividing the pseudo range interval into a plurality of increments having a plurality of grid points;

aligning a sliding pseudo range window having a width over the pseudo range interval at a first of the plurality of grid points and counting the number of pseudo range measurements within the sliding pseudo range window, and then repeating for each of the plurality of grid points within the pseudo range interval;

selecting a best window based on a maximal number of pseudo range measurements within the sliding pseudo range window; comparing the maximal number with an incidence threshold; and then based on the comparison, determining an average pseudo range value;

wherein the sliding pseudo range window width is 300 meters.

7. (Currently amended) ~~The method of claim 1~~ A method for determining a position of a device, comprising:

receiving a plurality of pseudo range measurements from a transmitting source;

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adjusting each of the plurality of pseudo range measurements for time correction and then arranging each of the plurality of pseudo range measurements in order of smallest value to largest value to form a pseudo range interval with the smallest value and the largest value as endpoints;

dividing the pseudo range interval into a plurality of increments having a plurality of grid points;

aligning a sliding pseudo range window having a width over the pseudo range interval at a first of the plurality of grid points and counting the number of pseudo range measurements within the sliding pseudo range window, and then repeating for each of the plurality of grid points within the pseudo range interval;

selecting a best window based on a maximal number of pseudo range measurements within the sliding pseudo range window; comparing the maximal number with an incidence threshold; and then based on the comparison, determining an average pseudo range value;

wherein the value of each of the plurality of increments is 5 meters.

8. (Currently amended) ~~The method of claim 4~~ A method for determining a position of a device, comprising:

receiving a plurality of pseudo range measurements from a transmitting source;

adjusting each of the plurality of pseudo range measurements for time correction and then arranging each of the plurality of pseudo range measurements in order of smallest value to largest value to form a pseudo range interval with the smallest value and the largest value as endpoints;

dividing the pseudo range interval into a plurality of increments having a plurality of grid points;

aligning a sliding pseudo range window having a width over the pseudo range interval at a first of the plurality of grid points and counting the number of pseudo range

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measurements within the sliding pseudo range window, and then repeating for each of the plurality of grid points within the pseudo range interval;

selecting a best window based on a maximal number of pseudo range measurements within the sliding pseudo range window; comparing the maximal number with an incidence threshold; and then based on the comparison, determining an average pseudo range value;

wherein the quantity of the plurality of pseudo range measurements equaling N, and wherein the incidence threshold is the larger of: a filtering threshold times N, or 4 times N divided by the sum of 3 and the sliding pseudo range window width in units of GPS chips.

9. (Original) The method of claim 8 wherein the value of the filtering threshold is 1/3.

10. (Original) The method of claim 8 wherein the maximal number is less than the incidence threshold, and the average pseudo range value is an average of the plurality of pseudo range measurements.

11. (Original) The method of claim 10 wherein the average of the plurality of pseudo range measurements is equally weighted.

12. (Original) The method of claim 11 further comprising the step of determining an average SNR corresponding to the average pseudo range value.

13. (Original) The method of claim 12 wherein the average SNR is multiplied by a fraction.

14. (Original) The method of claim 13 wherein the fraction is one-tenth.

15. (Original) The method of claim 10 further comprising the step of determining an average RMSE corresponding to the average pseudo range value.

16. (Original) The method of claim 15 wherein the average RMSE is multiplied by a multiple value.

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17. (Original) The method of claim 8 wherein the maximal number is equal or greater than the incidence threshold, and the average pseudo range value is an average of the pseudo range measurements within the best window.

18. (Original) The method of claim 17 wherein the average of the pseudo range measurements within the best window is equally weighted.

19. (Original) The method of claim 17 further comprising the step of determining an average SNR corresponding to the average pseudo range value.

20. (Original) The method of claim 17 further comprising the step of determining an average RMSE corresponding to the average pseudo range value.

21. (Currently amended) ~~The method of claim 1~~ A method for determining a position of a device, comprising:

receiving a plurality of pseudo range measurements from a transmitting source;

adjusting each of the plurality of pseudo range measurements for time correction and then arranging each of the plurality of pseudo range measurements in order of smallest value to largest value to form a pseudo range interval with the smallest value and the largest value as endpoints;

dividing the pseudo range interval into a plurality of increments having a plurality of grid points;

aligning a sliding pseudo range window having a width over the pseudo range interval at a first of the plurality of grid points and counting the number of pseudo range measurements within the sliding pseudo range window, and then repeating for each of the plurality of grid points within the pseudo range interval;

selecting a best window based on a maximal number of pseudo range measurements within the sliding pseudo range window; comparing the maximal number with an incidence threshold; and then based on the comparison, determining an average pseudo range value;

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wherein each of the plurality of pseudo range measurements having an associated Doppler offset and further comprising the step of comparing the associated Doppler offset with a Doppler threshold.

Claim 22. (Cancelled)

23. (Currently amended) ~~The method of claim 1 further~~ A method for determining a position of a device, comprising:

receiving a plurality of pseudo range measurements from a transmitting source;

adjusting each of the plurality of pseudo range measurements for time correction and then arranging each of the plurality of pseudo range measurements in order of smallest value to largest value to form a pseudo range interval with the smallest value and the largest value as endpoints;

dividing the pseudo range interval into a plurality of increments having a plurality of grid points;

aligning a sliding pseudo range window having a width over the pseudo range interval at a first of the plurality of grid points and counting the number of pseudo range measurements within the sliding pseudo range window, and then repeating for each of the plurality of grid points within the pseudo range interval;

selecting a best window based on a maximal number of pseudo range measurements within the sliding pseudo range window; comparing the maximal number with an incidence threshold; and then based on the comparison, determining an average pseudo range value;

repeating the steps of claim 1 M - 1 (i.e., M minus one) times for each of remaining M - 1 transmitting sources to determine a plurality of M average pseudo range values.

24. (Original) The method of claim 23 further comprising the step of determining the position of the device based on the plurality of M average pseudo range values.

25. (Original) A method for determining a position of a device, comprising:

receiving a plurality of pseudo range measurements from a transmitting source;

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adjusting each of the plurality of pseudo range measurements for time correction and then arranging each of the plurality of pseudo range measurements in order of smallest value to largest value to form a pseudo range interval with the smallest value and the largest value as endpoints;

dividing the pseudo range interval into a plurality of increments having a plurality of grid points;

aligning a sliding pseudo range window having a width over the pseudo range interval at a first of the plurality of grid points and counting the number of pseudo range measurements within the sliding pseudo range window, and then repeating for each of the plurality of grid points within the pseudo range interval;

selecting a plurality of best windows based on at least one predetermined criterion and determining a plurality of average pseudo range values wherein each of the plurality of average pseudo range values corresponding to each of the plurality of best windows.

26. (Currently amended) The method of claim 25 further comprising the step of determining a plurality of [[SNRs]] average signal-to-noise ratios (SNRs) wherein each of the plurality of average SNRs corresponding to each of the plurality of average pseudo range values.

27. (Original) The method of claim 25 further comprising the step of determining a plurality of average RMSEs wherein each of the plurality of average RMSEs corresponding to each of the plurality of average pseudo range values.

28. (Original) The method of claim 25 further comprising repeating the steps of claim 25 M - 1 (i.e., M minus one) times for each of remaining M - 1 transmitting sources.

29. (Original) The method of claim 28 further comprising the step of determining the position of the device based on a combination of the plurality of best windows.

30. (Original) A device for determining position, comprising:

a receiver for receiving a plurality of pseudo range measurements from a transmitting source;

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a processor coupled to the receiver and configured to accept the plurality of pseudo range measurements for processing by:

i) adjusting each of the plurality of pseudo range measurements for time correction and then arranging each of the plurality of pseudo range measurements in order of smallest value to largest value to form a pseudo range interval with the smallest value and the largest value as endpoints;

ii) dividing the pseudo range interval into a plurality of increments having a plurality of grid points;

iii) aligning a sliding pseudo range window having a width over the pseudo range interval at a first of the plurality of grid points and counting the number of pseudo range measurements within the sliding pseudo range window, and then repeating for each of the plurality of grid points within the pseudo range interval;

iv) selecting a best window based on a maximal number of pseudo range measurements within the sliding pseudo range window and comparing the maximal number with an incidence threshold; and then based on the comparison, determining an average pseudo range value.

31. (Original) A device for determining a position, comprising:

a receiver for receiving a plurality of pseudo range measurements from a transmitting source;

a processor coupled to the receiver and configured to accept the plurality of pseudo range measurements for processing by:

i) adjusting each of the plurality of pseudo range measurements for time correction and then arranging each of the plurality of pseudo range measurements in order of smallest value to largest value to form a pseudo range interval with the smallest value and the largest value as endpoints;

ii) dividing the pseudo range interval into a plurality of increments having a plurality of grid points;

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iii) aligning a sliding pseudo range window having a width over the pseudo range interval at a first of the plurality of grid points and counting the number of pseudo range measurements within the sliding pseudo range window, and then repeating for each of the plurality of grid points within the pseudo range interval;

iv) selecting a plurality of best windows based on at least one predetermined criterion and determining a plurality of average pseudo range values wherein each of the plurality of average pseudo range values corresponding to each of the plurality of best windows.

32. (Original) A device for determining position, comprising:

means for receiving a plurality of pseudo range measurements from a transmitting source;

means for adjusting each of the plurality of pseudo range measurements for time correction and then arranging each of the plurality of pseudo range measurements in order of smallest value to largest value to form a pseudo range interval with the smallest value and the largest value as endpoints;

means for dividing the pseudo range interval into a plurality of increments having a plurality of grid points;

means for aligning a sliding pseudo range window having a width over the pseudo range interval at a first of the plurality of grid points and counting the number of pseudo range measurements within the sliding pseudo range window, and then repeating for each of the plurality of grid points within the pseudo range interval;

means for selecting a best window based on a maximal number of pseudo range measurements within the sliding pseudo range window and comparing the maximal number with an incidence threshold; and then based on the comparison, determining an average pseudo range value.

33. (Original) A method for determining a position of a device, comprising:

means for receiving a plurality of pseudo range measurements from a transmitting source;

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means for adjusting each of the plurality of pseudo range measurements for time correction and then arranging each of the plurality of pseudo range measurements in order of smallest value to largest value to form a pseudo range interval with the smallest value and the largest value as endpoints;

means for dividing the pseudo range interval into a plurality of increments having a plurality of grid points;

means for aligning a sliding pseudo range window having a width over the pseudo range interval at a first of the plurality of grid points and counting the number of pseudo range measurements within the sliding pseudo range window, and then repeating for each of the plurality of grid points within the pseudo range interval;

means for selecting a plurality of best windows based on at least one predetermined criterion and determining a plurality of average pseudo range values wherein each of the plurality of average pseudo range values corresponding to each of the plurality of best windows.

Claim 34. (Cancelled)

35. (Original) Computer readable media embodying a program of instructions executable by a computer program to perform a method for determining a position of a device, the method comprising:

receiving a plurality of pseudo range measurements from a transmitting source;

adjusting each of the plurality of pseudo range measurements for time correction and then arranging each of the plurality of pseudo range measurements in order of smallest value to largest value to form a pseudo range interval with the smallest value and the largest value as endpoints;

dividing the pseudo range interval into a plurality of increments having a plurality of grid points;

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aligning a sliding pseudo range window having a width over the pseudo range interval at a first of the plurality of grid points and counting the number of pseudo range measurements within the sliding pseudo range window, and then repeating for each of the plurality of grid points within the pseudo range interval;

selecting a plurality of best windows based on at least one predetermined criterion and determining a plurality of average pseudo range values wherein each of the plurality of average pseudo range values corresponding to each of the plurality of best windows.

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